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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NGUYEN, STEVEN H D	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/754,905	SYDON ET AL.	
	Examiner	Art Unit	
	Steven HD Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 6-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 6-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed on 9/14/04. Claims 4-5 have been canceled and claims 1-3 and 6-34 are pending in the application.

Claim Objections

2. Claims 26-31 are objected to because of the following informalities: "unites" should be changed to – units -. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 11-27, 30-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As claim 11, the limitation "the second remote unit synchronizing to the first ... via the dedicated radio frequency connection".

As claim 20, the limitation "synchronizing the second remote unit ... via the dedicated communication channel".

As claim 32, the limitation "during direct communication between the first ... synchronizes to the first remote unit".

The specification, page 6, lines 11-330, does not disclose the first and second remote unit exchanges the synchronized message via the assigned channel. The remote units are synchronized by the central unit.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 6-10 and 28-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyake (USP 5903618).

Regarding claim 1, Miyake discloses (Figs 1-22 and col. 1, lines 5 to col. 13, lines 5) a cordless communication system comprising a central unit (Fig 1, Ref 10); and at leàst two remote units (Fig 1, Ref 18 capable of radio frequency communication with said central unit and other of said at least two remote units a first of said at least two remote units is capable of providing a request to said central unit for a direct connection with a second of said at least two remote units; wherein said central unit is capable of assigning a dedicated communication channel for enabling direct communication between selected ones of said at least two remote units upon receiving a request from said first remote unit, said central unit assigns a dedicated communication channel

for enabling direct communication between said first and second remote units, said second remote unit synchronizing to said first remote unit (Figs 10-11, 15-16 and col. 9, lines 19-42 and col. 2, lines 4-67, the synchronizing between units is not via the assigned dedicated communication channel therefore the first and second are synchronized with each other via the sync signal from the central unit).

Regarding claim 2, Miyake discloses each of said at least two remote units is further capable of communication with another of said at least two remote units via a radio frequency connection relayed through said central unit (Col 2, lines 4-10).

Regarding claims 3, Miyake discloses each of said remote units synchronize to said central unit during communication with the central unit (Col. 2, lines 61-67).

Regarding claim 6, Miyake discloses said radio communication comprises time division duplex connections utilizing a time division multiple access (TDMA) scheme (col. 8, lines 1-21).

Regarding claims 7 and 28, Miyake discloses said radio communication comprises a frequency hopping spread spectrum (FHSS) scheme and said central unit assigns the dedicated communication channel by assigning a specific hop sequence to selected ones of said at least two remote units being orthogonal (col. 8, lines 1-21 and col. 9, lines 19-42).

Regarding claims 8 and 29, Miyake discloses said radio frequency communication comprises direct sequence spread spectrum (DSSS) scheme and said central unit assigns said dedicated communication channel by assigning a specific spreading code to selected ones of said at least two remote units being orthogonal (Col. 4, lines 47 to col. 5, lines 8 and col. 9, lines 19-42).

Regarding claim 9, Miyake discloses said central unit provides an interface for interfacing the communication system with a network (Fig 1).

Regarding claim 10, Miyake discloses the network comprises at least one of a public switched telephone network (PSTN), an integrated services digital network (ISDN), the Internet, and an Intranet (Col. 4, lines 30-46).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 11-27 and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyake (USP 5903618) in view of Morvan (USP 6574452).

Regarding claims 11-12 and 32, Miyake discloses (Figs 1-22 and col. 1, lines 5 to col. 13, lines 5) a cordless communication system, comprising a central unit (Fig 1, Ref 10); and at least two remote units capable of radio frequency communication with said central unit (Fig 1, Ref 10 and 18); wherein each of said at least two remote units is capable of communication with another of said at least two remote units via a radio frequency connection relayed through said central unit (Col 2, lines 4-10); and wherein a first of said at least two remote units is further capable of communication with a second of said at least two remote units via a dedicated radio frequency connection assigned by said central unit for enabling direct communication between said first remote unit and said second remote unit (Figs 10-11, 15-16 and col. 9, lines 19-42 and col. 2,

lines 4-67) and each of said remote units synchronize to said central unit during communication with the central unit (Col. 2, lines 61-67). However, Miyake fails to disclose the second remote unit synchronizing to the first remote unit during communication with the first remote unit via the dedicated radio channel. In the same field of endeavor, Morvan discloses a method and system comprising the terminals capable of performing a direct mode "confidential mode" or trunk mode "normal mode via a base station" by allowing the terminals to setup a direct mode by using the normal mode, after setting up the direct mode, one of the terminal switches to base station mode and synchronize with the other terminal (See col. 41, lines 5-39).

Since, the clock of terminals which is synchronized with a clock of base station will be drift during a cycle of broadcasting a sync message from the base station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for synchronizing the terminals after setup a direct mode by using its old clock as disclosed by Morvan into Miyake's system. The motivation would have been to prevent data loss during the communication between and improve the throughput of the base station.

Regarding claim 13, Miyake discloses a first of said at least two remote units is capable of providing a request to said central unit for a direct connection with a second of said at least two remote units (Fig 10, Ref 12).

Regarding claim 14, Miyake discloses upon receiving a request from said first remote unit, said central unit assigns a dedicated communication channel for enabling direct communication between said first and second remote units, said second remote unit

synchronizing to said first remote unit (Figs 10-11, 15-16 and col. 9, lines 19-42 and col. 2, lines 4-67).

Regarding claim 15, Miyake discloses said radio communication comprises time division duplex connections utilizing a time division multiple access (TDMA) scheme (col. 8, lines 1-21).

Regarding claims 16, 24, 26, 30 and 33, Miyake discloses said radio communication comprises a frequency hopping spread spectrum (FHSS) scheme and said central unit assigns the dedicated communication channel by assigning a specific hop sequence to selected ones of said at least two remote units being orthogonal (col. 8, lines 1-21 and col. 9, lines 19-42).

Regarding claims 17, 25, 27, 31 and 34, Miyake discloses said radio frequency communication comprises direct sequence spread spectrum (DSSS) scheme and said central unit assigns said dedicated communication channel by assigning a specific spreading code to selected ones of said at least two remote units (Col. 4, lines 47 to col. 5, lines 8 and col. 9, lines 19-42).

Regarding claim 18, Miyake discloses said central unit provides an interface for interfacing the communication system with a network (Fig 1).

Regarding claim 19, Miyake discloses the network comprises at least one of a public switched telephone network (PSTN), an integrated services digital network (ISDN), the Internet, and an Intranet (Col. 4, lines 30-46).

Regarding claim 20, Miyake discloses (Figs 1-22 and col. 1, lines 5 to col. 13, lines 5) a method for providing direct radio frequency communication between remote units in a cordless communication system, comprising providing a request to a central unit for direct radio frequency communication between a first remote unit and a second remote unit (Figs 10 and 15, Ref 12); and initiating a direct connection between the first remote unit and the second remote

unit via a dedicated communication channel assigned to the first remote unit and the second remote unit by the central unit (Figs 10-11, 15-16 and col. 9, lines 19-42 and col. 2, lines 4-67). However, Miyake fails to disclose synchronizing the second remote unit to the first remote unit during direct communication between the first remote unit and the second remote unit via the dedicated communication channel. In the same field of endeavor, Morvan discloses a method and system comprising the terminals capable of performing a direct mode "confidential mode" or trunk mode "normal mode via a base station" by allowing the terminals to setup a direct mode by using the normal mode, after setting up the direct mode, one of the terminal switches to base station mode and synchronize with the other terminal (See col. 41, lines 5-39).

Since, the clock of terminals which is synchronized with a clock of base station will be drift during a cycle of broadcasting a sync message from the base station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for synchronizing the terminals after setup a direct mode by using its old clock as disclosed by Morvan into Miyake's system. The motivation would have been to prevent data loss during the communication between and improve the throughput of the base station.

Regarding claim 21, Miyake discloses further comprising determining that communication between the first remote unit and the second remote unit has ended; and terminating the direct connection between the first remote unit and the second remote unit (Figs 11 and 15, Ref 54, 56, 58, 60 and 62, col. 9, lines 19-42).

Regarding claim 22, Miyake discloses wherein determining that communication between the first remote unit and the second remote unit has ended comprises providing an indication to

the central unit that communication between the first remote unit and the second remote unit has ended (Figs 11 and 15, Ref 54, 56, 58, 60 and 62, col. 9, lines 19-42).

Regarding claim 23, Miyake discloses initiating a direct connection between the first remote unit and the second remote unit comprises assigning the dedicated communication channel (col. 9, lines 19-42).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tanaka (USP 5636243) discloses a method and system for performing a direct communication between the terminals.

Masuda (USP 5748621) a method and system for performing a direct communication between the terminals.

Nicholas (GB 2285723) a method and system for performing a direct communication between the terminals.

Chieu (USP 5515366) a method and system for performing a direct communication between the terminals.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

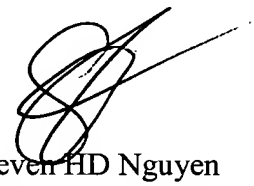
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
1/5/05